

Preface

This document is Volume 1 of three volumes of the Final Environmental Impact Statement (NEPA) and Final Environmental Impact Report (CEQA) (hereafter referred to as the Final EIS/R) for the Interstate 880/State Route 92 Interchange Reconstruction Project. Volume 1 is a combination summary and update of the information from the Draft EIS/R (1997) and the Supplement to the Draft EIS/R (2002) for the I-880/Route 92 Interchange Reconstruction Project.

Volume 2 of the Final EIS/R includes written and oral comments from individuals, organizations, businesses, and government agencies about the proposed project and/or the Draft EIS/R (DEIS/R). All of these comments were received in 1997 during the comment period and at the public hearing for the DEIS/R. This volume also provides responses to substantive and significant comments per Title 23, Code of Federal Regulations, Section 771.125(a)(1) and Title 14, California Code of Regulations, Chapter 3, Section 15132.

Similar to Volume 2, Volume 3 includes written and oral comments from individuals, organizations, businesses, and government agencies about the proposed project and/or the Supplement to the DEIS/R. All of these comments were received in 2002 during the comment period and the public hearing for the Supplement to the DEIS/R. Volume 3 also provides responses to these comments.

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Summary

The California Department of Transportation (Caltrans), the Federal Highway Administration (FHWA), the Bay Area Toll Authority (BATA), and the Alameda County Transportation Improvement Authority (ACTIA) propose to replace the existing, four-quadrant, cloverleaf I-880/Route 92 Interchange (IC) with a new interchange. The existing configuration of the interchange is unable to efficiently handle traffic volumes on two of the most heavily congested freeways in the San Francisco Bay Area. Weaving and merging conflicts on Route 92 between the loop connectors and on the collector-distributor segments of Interstate 880 cause queues and exacerbate congestion on I-880 and Route 92. Traffic studies have projected continuing deterioration of traffic operations at the interchange in 2025 as a result of growth in population and employment as well as improvements upstream and downstream of the project limits.

This interchange is in the city of Hayward, Alameda County. On I-880, the project limits are from the Winton Avenue interchange to the Tennyson Road interchange. On State Route 92, the easterly project limit is the intersection of Jackson Street and Santa Clara Street; the westerly project limit is the Mt. Eden Overhead (a structure over a railroad corridor) west of the Industrial Boulevard interchange. These are logical termini since other projects have already improved I-880 and Route 92 beyond the project limits.

The purpose of the proposed project is to improve traffic operations and relieve peak period congestion, accommodate projected increases in traffic, eliminate some of the potential causes of the high rate of accidents at this interchange, and reduce the need for drivers to take alternative routes.

The proposed project has three build alternatives—2C Variation, 2D Variation, and H—and a no build alternative. Common features of the three build alternatives that accomplish the purpose of the project include:

- two direct, flyover connectors from Route 92 to I-880 that replace two of the existing loop connectors
- widening of direct, diagonal connector from I-880 southbound to Route 92 westbound
- auxiliary lanes on I-880 north and south of Route 92

- traffic operation system improvements such as ramp metering and high occupancy vehicle (HOV) bypass lanes
- improvements at the terminus of Route 92 as a freeway at Jackson and Santa Clara Streets and at the intersection of Route 92 on- and off-ramps with Hesperian Boulevard

The build alternatives also replace the Cheney-Eldridge Pedestrian Overcrossing with one that meets Americans with Disabilities Act (ADA) standards, extend sound walls to provide noise abatement for residences adjacent to Route 92 without sound walls [this is an incorporation of a previously committed project (Expenditure Authorization 127720) under the HB 311 Community Noise Abatement Program], and provide berms for visual screening of interchange structures.

Twenty other alternatives were withdrawn from consideration because of failure to meet the purpose and need operational improvement criteria, environmental impacts, and/or costs in excess of programmed funding. More details about these withdrawn alternatives are included in Chapter 2.

Alternatives 2C and 2D Variations are identical in interchange geometrics. Both are three-level interchanges in which the uppermost level is 10.02 meters (32.88 feet) higher than the existing Route 92 overcrossing of I-880 (see Figure S-1).^{*} Their new direct connectors exit from the left lane and enter I-880 in the right lane. The entrances of these new, direct connectors to I-880 are “braided” with the entrances and exits of other connectors and ramps. This braiding of the entrance of the new direct connector from Route 92 eastbound to I-880 northbound prevents vehicles from this connector from exiting at the next, downstream interchange (Winton Avenue) on I-880. Alternatives 2C and 2D Variations also have combination retaining/sound walls higher than 10 m (32.8 feet) adjacent to some homes.

Alternative 2D Variation differs from Alternative 2C Variation only in I-880 alignment north of the interchange. Alternative 2D Variation involves a westward shift of I-880 north of the interchange for a distance of about 914 m (3,000 feet), and includes an auxiliary lane on southbound I-880 between Winton Avenue and Route 92 westbound off-ramp. With this shift, Alternative 2D Variation requires taking fourteen homes on Magnolia and

^{*} Figures are located in Chapter 12.

Poinciana Streets, the Southgate Swim Club, and portions of other properties including Southland Mall. In comparison, Alternative 2C Variation involves an eastward shift of I-880 north of the interchange, and requires taking fifty-seven homes on Willimet Way.

Caltrans presented Alternatives 2C and 2D Variations to the public in a Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R) and Public Hearing in May and June 1997. The right-of-way requirements, visual impacts, and change in access to the Winton Avenue interchange (for traffic on the Route 92 eastbound to I-880 northbound connector) of Alternatives 2C Variation and 2D Variation proved to be important concerns for the surrounding neighborhoods, the owner of Southland Mall, the Southgate Swim Club, the City of Hayward, the Citizens Advisory Committee (CAC), and others. Because of opposition to these alternatives, the Alameda County Congestion Management Agency (CMA) made available a consultant to modify a previously rejected Alternative 2H (one of the concepts initiated and supported by the CAC and the City of Hayward) so that its environmental impacts were less pronounced, its operation were feasible, and the purpose and need for the project were met. This modified build alternative eventually became Alternative H.

The geometrics for Alternative H differ substantially from Alternatives 2C and 2D Variations. As with the existing interchange, Alternative H would be a two-level structure. Alternative H would, however, be 5.26 m (17.26 feet) higher than the existing Route 92 overcrossing of I-880. The highest combination retaining/sound wall for Alternative H is 7.5 m (24 feet). The new direct connectors for Alternative H exit Route 92 from the right lane and enter I-880 in the right lanes. Alternative H retains all major traffic movements, but vehicles exiting from I-880 northbound to downtown Hayward are prevented from crossing over four lanes to make a left turn at the intersection of Jackson and Santa Clara Streets. The right-of-way requirements of Alternative H include taking twelve homes on Peterman Avenue.

Caltrans presented Alternative H to the public in a Supplement to the DEIS/R and at a Public Hearing in June and in July 2002. Following a review and consideration of all comments received on the DEIS/R and the Supplement to the DEIS/R, Caltrans and the City of Hayward concluded that remaining

concerns about Alternative H could be resolved and mitigated. On December 4, 2002, the I-880/Route 92 Interchange Project Development Team (PDT) met again. Based on all the information, comments, and issues about the proposed project, the PDT found that Alternative H has fewer environmental impacts than Alternatives 2C and 2D Variations, meets the purpose and need for the proposed project, and is within the funding already programmed for the proposed project (see Tables S-1, S-2, S-3). Consequently, the PDT acted to identify Alternative H as the Preferred Alternative for the proposed project.

With Alternative H, there are still: construction impacts (noise, dust generation, truck traffic, potential air and water quality discharges); twelve residences to be acquired and demolished; an alteration of the neighborhood character where residences are replaced with a sound wall; a change in views resulting from an increase in height of freeway facilities (e.g., connectors, Route 92/I-880 separation structure, combination retaining/sound walls); an increase in ambient traffic noise; a loss of three, small wetlands; and a slight increase in the amount of impervious surface area. Nevertheless, the benefits of Alternative H include improved traffic operations, improved regional air quality, ambient traffic noise abatement for residences currently without sound walls, a new pedestrian overcrossing that meets ADA standards, and an expanded pump station to handle storm water runoff.

The proposed project addresses construction impacts through the preparation and implementation of a Transportation Management Plan (TMP). For owners of homes to be acquired, the proposed project provides fair market value for their properties and relocation assistance. To mitigate visual, noise, and wetland impacts, the proposed project uses berms and landscaping to screen views of freeway structures, sound walls to attenuate ambient traffic noise, and a new, larger wetland with better natural qualities than the existing wetlands. Per existing practices, Caltrans monitors replacement landscape plantings until they become established, new wetlands to ensure their viability, ramp metering operations to optimize traffic flow, pump plant operations to protect water quality as required in its National Pollution Discharge Elimination System (NPDES) permit and Storm Water Management Plan, and upkeep and appearance of sound walls and freeway facilities as part of its commitment of being a good steward of public resources and a good neighbor to the community.

Table S1 Summary: Environmental Issues

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Hydrology, Water Quality, and Storm Water Runoff	<ul style="list-style-type: none"> Reduction of contaminants in runoff during and after construction through the use of Best Management Practices (BMPs) Pump plant would handle runoff and allow for settlement of sediments before discharge 	<ul style="list-style-type: none"> Identical to Alt. H 	<ul style="list-style-type: none"> Identical to Alt. H 	<ul style="list-style-type: none"> No change in impacts Reduction of contaminants in runoff only through maintenance BMPs
Hazardous Materials and Waste	<ul style="list-style-type: none"> Two parcels in which peripheral portions would be acquired are on hazardous waste databases Soils potentially contaminated with aerially deposited lead and petroleum hydrocarbons would be excavated, but managed to limit public exposure and environmental contamination Asbestos sheet piling in structure joints may pose health and safety concerns for construction workers, the public, and the environment only if allowed to become friable and uncontained Hazardous waste exposure would be minimal with implementation of the construction contractor's health and safety plan, worker safety training, and appropriate management of lead-contaminated soils and asbestos materials Potential land disposal of lead-contaminated soils and asbestos-containing debris would reduce remaining capacity of landfill sites by a negligible amount 	<ul style="list-style-type: none"> Two parcels in which peripheral portions would be acquired are on hazardous waste databases Is similar to H with respect to lead, asbestos sheet piling, potential exposure impact, and land disposal 	<ul style="list-style-type: none"> Four parcels in which portions would be acquired are on hazardous waste databases Is similar to H with respect to lead, asbestos sheet piling, potential exposure impact, and land disposal 	No change

Summary

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Air Quality and Meteorology	<ul style="list-style-type: none"> Project would not result in adverse CO or ozone impacts Localized impacts of PM₁₀, PM_{2.5} and air toxics are not expected to be more than existing or approach Federal or State standards During construction, efforts would be undertaken to monitor and control PM₁₀ and reduce equipment usage of diesel fuel 	Identical to Alt. H	Identical to Alt. H	No change
Noise	<ul style="list-style-type: none"> Extends sound walls to provide noise abatement for 26 homes Generates construction noise (pile driving, demolition, etc.) during the days and possibly a few nights Results in increased future ambient traffic noise levels 	<ul style="list-style-type: none"> Similar to H Proposed sound walls would be slightly higher in SW and SE quadrants There would be sound walls on the two direct connectors 	<ul style="list-style-type: none"> Similar to H Proposed sound walls would be slightly higher in SW and SE quadrants There would be sound walls on the two direct connectors 	<ul style="list-style-type: none"> There would be no extensions of sound walls on Route 92 adjacent to houses along Hesperian on-ramp, on Booker Way, and on Townsend Avenue and Teasdale Place There would still be an increase in future ambient noise levels
Wetlands	<ul style="list-style-type: none"> Affects wetlands totaling less than 0.132 ha (0.326 acre), but lacking important wetland animal species, and in roadway drainage areas Replaces wetlands within project area at up to a 2:1 ratio 	<ul style="list-style-type: none"> Identical to Alt. H; 0.132 ha (0.326 acre) affected 	<ul style="list-style-type: none"> Identical to Alt. H; 0.132 ha (0.326 acre) affected 	<ul style="list-style-type: none"> No change
Vegetation	<ul style="list-style-type: none"> Removes landscaping in right-of-way and in yards of residences to be acquired, but replaces landscaping where sufficient space is available 	<ul style="list-style-type: none"> Identical to Alt. H 	<ul style="list-style-type: none"> Identical to Alt. H 	<ul style="list-style-type: none"> No change
Land Use, Planning, and Growth	<ul style="list-style-type: none"> Demolishes and replaces twelve (12) residences with freeway facilities Results in partial acquisitions of six (6) residential and five (5) non-residential properties Requires thirty-nine (39) permanent easements and fifteen (15) temporary easements Is basically in conformance with general and neighborhood plans 	<ul style="list-style-type: none"> Replaces fifty-seven (57) residences Results in partial acquisitions of three (3) residential and three (3) non-residential properties Requires seven (7) permanent easements and 120 temporary easements Conflicts with general and neighborhood plans 	<ul style="list-style-type: none"> Replaces fourteen (14) residences and one non-residential (swim club) properties Results in five (5) partial acquisitions of non-residential parcels, and three (3) residential properties Requires twenty-one (21) permanent easements and 148 temporary easements Conflicts with general and neighborhood plans 	<ul style="list-style-type: none"> No change

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Community Impacts, Socio-Economic, and Environmental Justice	<ul style="list-style-type: none"> Results in reduction in property tax revenues to City of Hayward that is negligible relative to total property tax revenues collected Reduction in property tax revenues would also be offset by the net gain in property tax revenues from the annual average rate of construction of more than two hundred residences Loss of neighbors on a portion of Peterman Avenue Results in no fiscal impact to displaced homeowners and tenants who would receive market value compensation for their properties and relocation assistance 	<ul style="list-style-type: none"> Similar to H, except that the loss of neighbors would be on a portion of Willimet Way instead of Peterman Avenue (or Magnolia Way as in Alt. 2D Var.) and would be more pronounced than H because an entire row of houses would be replaced with a wall Alteration in accessibility of Southgate Mall from Route 92 eastbound may affect patronage and retail revenues and limit future expansion 	<ul style="list-style-type: none"> Similar to H, except that the loss of neighbors would be on a portion of Magnolia Way instead of Peterman Avenue (or Willimet Way as in Alt. 2C Var.) and would be more pronounced than H because an entire row of houses would be replaced with a wall Loss of 200 parking spaces and alteration in accessibility of Southgate Mall from Route 92 eastbound may affect retail revenues and limit future expansion 	<ul style="list-style-type: none"> No change
Utilities and Community Emergency Services	<ul style="list-style-type: none"> Has no impacts upon community facilities Requires relocation of some utility lines May require signalization adjustments and traffic control by the City of Hayward during construction 	Same as H	<ul style="list-style-type: none"> Same as H, except that the Southgate Swim Club would be demolished 	No change
Traffic, Pedestrian and Bicycle Circulation, and Parking	<ul style="list-style-type: none"> May require forty-one (41) off-street parking spaces at condominium complexes and church at Calaroga Avenue during construction; Caltrans is considering designs that would not encroach upon parking areas or would only require use of the parking areas during the day Minimizes construction impact on vehicular circulation by avoiding lane, ramp, and street closures during peak commute hours, and by controlling use of local streets by heavy construction trucks Maintains access on walk- and bikeways on the Calaroga and the Cheney-Eldridge overcrossings during construction 	<ul style="list-style-type: none"> Similar to H Would permanently require 7 m² (76 sq. ft.) of off-street parking at apartment complex Requires Route 92 eastbound traffic to exit at I-880/Winton IC instead of Santa Clara Street Would not require reconstruction of the Calaroga Overcrossing Maintains access on walkways and bikeways as with H, except that Calaroga Overcrossing of Route 92 would remain unaffected Would alter circulation patterns of vehicles from Route 92 eastbound exiting at I-880/A Street IC to access Southland Mall 	<ul style="list-style-type: none"> Similar to H Would permanently require off-street parking at apartment complex and approximately 200 spaces at the Southgate Mall Would not require reconstruction of the Calaroga Overcrossing Maintains access on walkways and bikeways as with H, except that Calaroga Overcrossing of Route 92 would remain unaffected Would alter circulation patterns of vehicles from Route 92 eastbound exiting at I-880/A Street IC to access Southland Mall 	<ul style="list-style-type: none"> No change in parking, circulation, or access Cheney-Eldridge Pedestrian Overcrossing would not be in conformance with ADA standards

Summary

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Visual	<ul style="list-style-type: none"> • New Route 92 bridge over I-880 would be 17 feet higher than existing structure • Replaces view of twelve (12) residences on Peterman Avenue with a sound wall • Includes a 6.71 m (22 ft.) high combination retaining/sound wall behind two to four residences on Booker Way • Results in a reduction in privacy for a few more homes and yards adjacent to the reconstructed pedestrian overcrossing (POC) • Reduces visual qualities of Route 92 by removing landscaping • Berms and landscaping will screen views of Route 92 overcrossing of I-880 for the NW and SE quadrants 	<ul style="list-style-type: none"> • Similar to H, except that the Route 92 bridge over I-880 would be a two level structure and 34 feet higher than existing structure • Replaces view of residences on Willimet Way with a view of a sound wall • Combination retaining/ sound walls would be higher than existing and affect a greater number of residences on Booker Way and Peterman Avenue than Alt. H • Berms and landscaping will eventually screen views of Route 92 overcrossing of I-880 for the NW and SE quadrants 	<ul style="list-style-type: none"> • Similar to H, except that the Route 92 bridge over I-880 would be a two level structure and 34 feet higher • Replaces views of residences and the Southgate Swim Club on Magnolia Street with a view of a sound wall • Combination retaining/ sound walls would be higher than existing and affect a greater number of residences on Booker Way, Peterman Avenue, and Willimet Way than Alt. H • Berms and landscaping will eventually screen views of Route 92 overcrossing of I-880 for the NW and SE quadrants 	No changes in views of freeway facilities

Note: None of the alternatives pose geological, energy, wildlife, threatened and endangered species, and historical/archaeological resource concerns.

Table S2 Summary: Meeting Purpose and Need

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Meeting Project Purpose► Meeting Needs ▼	Provides operational improvements and best vehicle throughput of the build alternatives	Provides operational improvements and better LOS in some segments of the interchange than Alternative H, but has a lower vehicle throughput and would prevent vehicles from Route 92 eastbound from exiting at the Winton Avenue interchange	Same as Alternative 2C Variation	Provides no operational improvements
Congestion Relief	<ul style="list-style-type: none"> Results in improved traffic operations through direct connectors, auxiliary lanes, HOV lanes Route 92 eastbound to I-880 northbound connector would be restriped with a third mixed-flow lane at the metering lights when needed to handle future traffic volumes and avoid increasing congestion and queues 	<ul style="list-style-type: none"> Similar to Alt. H Would also need third mixed flow lane at metering lights on the Route 92 eastbound to I-880 northbound connector 	Same as Alternative 2C Variation	No congestion relief
Additional Capacity to Meet Future Demands	Would accommodate vehicles on new connectors and ramps, wider Route 92 overcrossing of I-880, and additional auxiliary lanes	Has slightly less capacity than Alt. H because there are no additional auxiliary lanes on I-880, and one fewer lanes on Route 92 eastbound mainline to Jackson/Santa Clara	Same as Alternative 2C Variation	No additional capacity
Potential to Reduce Accidents	Would have three fewer points of conflict and increased distances between off- and on-ramps, thus less weaving	Similar to Alt. H, would have three fewer points of conflict	Same as Alternative 2C Variation	No potential accident reduction
Draws Vehicles Off Local Streets and Roads	Would be less of a bottleneck especially on Route 92 eastbound to downtown Hayward	Has slightly less potential than Alt. H, because Alt. H allows Route 92 eastbound traffic to exit at the Winton Avenue Interchange, while Alt. 2C Variation requires Route 92 eastbound traffic to exit before the I-880/ Route 92 IC or at the A Street IC and then to use streets to get to Southland Mall	Same as Alternative 2C Variation	No drawing vehicles off local streets and roads

Table S3 Summary: Project Funding and Costs

	Alternative H	Alternative 2C Variation	Alternative 2D Variation	No Build
Funding (2002\$)				
Regional Measure 1 Toll Revenues	\$124 million	\$124 million	\$124 million	0
Alameda County Measure B Funds	\$10 million	\$10 million	\$10 million	0
TOTAL	\$134 million	\$134 million	\$134 million	0
Costs (2002\$)	Estimated costs are within range of funding	Estimated costs exceed available funding	Estimated costs exceed available funding	Not applicable
Right of Way	\$9 million	\$19.8 million	\$15.2 million	Not applicable
Construction	\$98 million	\$104.6 million	\$106.4 million	Not applicable
Support & Contingency (est.)	\$27 million	\$30 million	\$30 million	Not applicable
TOTAL	\$134 million	\$154.4 million	\$151.6 million	Not applicable

Note:

Costs for Alternatives 2C Variation and 2D Variation were obtained by escalating the estimated 1997 cost to 2002 cost at a rate of 5% per year. The costs for right-of-way for Alternatives 2C Variation and 2D Variation may, however, exceed the estimates shown because of a higher escalation rate for right-of-way in the Bay Area.